

TABLE 2.16
SOUTH BELTWAY PRELIMINARY COST ESTIMATES
1996 DOLLARS

ITEM	MIDDLE		
	QUANTITY (ENGLISH)	UNIT PRICE (ENGLISH)	AMOUNT *
DIAMOND INTERCHANGE	3 ea	\$3,254,000	\$9,762,000
<i>structure</i>	1 230 sq m (13,200 sq ft)	\$970 (\$90)	\$1,188,000
<i>embankment</i>	474 000 cu m (620,000 cu yd)	\$2.60 (\$2)	\$1,240,000
<i>ramps</i>	19 700 sq m (23,600 sq yd)	\$42 (\$35)	<u>\$826,000</u>
<i>total each</i>			\$3,254,000
DIRECTIONAL INTERCHANGE			
US-77/South Beltway			
<i>structure (4)</i>	5 254 sq m (56,550 sq ft)	\$970 (\$90)	\$5,089,500
<i>embankment</i>	948 000 cu m (1,240,000 cu yd)	\$2.60 (\$2)	\$2,480,000
<i>ramps</i>	111 900 sq m (133,800 sq yd)	\$42 (\$35)	<u>\$4,683,000</u>
<i>total each</i>			\$12,252,500
South Beltway/N-2			
<i>structure (3)</i>	3 563 sq m (38,350 sq ft)	\$970 (\$90)	\$3,451,500
<i>embankment</i>	711 000 cu m (930,000 cu yd)	\$2.60 (\$2)	\$1,860,000
<i>ramps</i>	102 100 sq m (122,100 sq yd)	\$42 (\$35)	<u>\$4,273,500</u>
<i>total each</i>			\$9,585,000
ROADWAY CROSSING	3 ea	\$1,170,000	\$3,510,000
<i>structure</i>	873 sq m (9,400 sq ft)	\$970 (\$90)	\$846,000
<i>embankment</i>	124 000 cu m (162,000 cu yd)	\$2.60 (\$2)	<u>\$324,000</u>
<i>total each</i>			\$1,170,000
RAILROAD CROSSING	1 ea	\$1,934,000	\$1,934,000
<i>structure</i>	1 170 sq m (12,600 sq ft)	\$970 (\$90)	\$1,134,000
<i>embankment</i>	300 000 cu m (400,000 cu yd)	\$2.60 (\$2)	<u>\$800,000</u>
<i>total each</i>			\$1,934,000
BIKE TRAIL CROSSING		\$580,000	\$0
<i>structure</i>	370 sq m (4,000 sq ft)	\$970 (\$90)	\$360,000
<i>embankment</i>	84 100 cu m (110,000 cu yd)	\$2.60 (\$2)	<u>\$220,000</u>
<i>total each</i>			\$580,000
MINOR STREAM CROSSING	5 ea	\$756,000	\$3,780,000
<i>structure</i>	780 sq m (8,400 sq ft)	\$970 (\$90)	\$756,000
<i>embankment</i>	0 cu m (cu yd)	\$2.60 (\$2)	<u>\$0</u>
<i>total each</i>			\$756,000
MAJOR STREAM/RR CROSSING			
#1-Salt Creek			
<i>structure</i>	1 ea	\$3,780,000	\$3,780,000
	3 900 sq m (42,000 sq ft)	\$970 (\$90)	<u>\$3,780,000</u>
#2-UP RR			
<i>structure</i>	1 ea	\$4,202,000	\$4,202,000
	3 512 sq m (37,800 sq ft)	\$970 (\$90)	<u>\$3,402,000</u>
<i>embankment</i>	300 000 cu m (400,000 cu yd)	\$2.60 (\$2)	<u>\$800,000</u>
<i>total each</i>			\$4,202,000
#3-BN RR			
<i>structure</i>	1 ea	\$4,202,000	\$4,202,000
	3 512 sq m (37,800 sq ft)	\$970 (\$90)	<u>\$3,402,000</u>
<i>embankment</i>	300 000 cu m (400,000 cu yd)	\$2.60 (\$2)	<u>\$800,000</u>
<i>total each</i>			\$4,202,000
#4			
<i>structure</i>	1 ea	\$2,041,200	\$2,041,200
	2 107 sq m (22,680 sq ft)	\$970 (\$90)	<u>\$2,041,200</u>
INTERSECTIONS, AT GRADE	0 ea	\$500,000	\$0
PAVEMENT	166 300 sq m (198,900 sq yd)	\$42 (\$35)	\$6,961,500
SHOULDERS	76 250 sq m (91,200 sq yd)	\$16 (\$13)	\$1,185,600
CONNECTING LINK PAVEMENT	95 570 sq m (114,300 sq yd)	\$30 (\$25)	\$2,857,500
EXCAVATION	1 430 000 cu m (1,871,000 cu yd)	\$2.60 (\$2)	\$3,742,000
CULVERTS (major)	1 ea	\$250,000	\$250,000
DRAINAGE STRUCTURES	11 km (7 mi)	\$83,890 (\$135,000)	\$958,500
SUBTOTAL			\$71,004,000
CONTINGENCIES		20%	<u>\$14,201,000</u>
TOTAL CONSTRUCTION COST			\$85,205,000
ENGINEERING DESIGN		6%	\$5,112,000
CONSTRUCTION ADMIN		8%	\$6,816,000
HOUSES/COMMERCIAL	6 ea	\$500,000	\$3,000,000
RIGHT-OF-WAY	295 ha (730 ac)	\$25,000 (\$10,000)	\$7,300,000
TOTAL			\$107,433,000

* extended costs are based on English quantity and unit prices